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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/602,687

06/25/2003

Masayuki Takami

I-437

1359

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EXAMINER

SMITS, TALIVALDIS IVARS

ART UNIT

PAPER NUMBER

2626

MAIL DATE

DELIVERY MODE

10/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/602,687

Applicant(s)

TAKAMI ET AL.

Examiner

Talivaldis Ivars Smits

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-13, 15 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. In response to the Office Action mailed 3/16/2007 applicant has submitted an Amendment, filed 8/13/2007, amending independent claims 7 and 15, adding new claim 16, canceling claims 1-6 and 14, and arguing for the allowability of the amended independent claims.

The drawings filed 6/25/2003 are accepted.

Response to Arguments

2. Applicant's arguments with respect to amended independent claims 7 and 15 have been considered but are moot in view of the new ground(s) of rejection, next.

Claim Objections

3. Claim 16 is objected to because of the following informalities: It is recited as depending on itself. The examiner has interpreted the intended dependence to be on claim 15. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7, 8, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima *et al.* (7,035,806).

As to claims 7 and 15-16, Kojima *et al.* teach:

a storing unit for storing speech recognition data including a plurality of reference commands (recognized words or a grammar stored in advance, col. 8, lines 10-15);

a speech recognizing unit for recognizing the speech as a recognized reference command included commands stored in the storing unit (a voice recognition system for recognizing speech to control numerous different operating states within different available programs, col. 8, lines 20-32);

in the reference a detecting unit for detecting a certain operating state the device (detecting if a particular operation or program is currently running, (col. 10, lines 20-42);

a substituting unit for determining whether each of the reference commands is a selectable reference command that can be selected in the certain operating state, and for substituting, when the recognized reference command is determined to be not the selectable reference command, one of the selectable reference commands for the recognized reference command (when a program is found not to be active, the commands for that program are made unavailable, and any input command for that inactive program is substituted with a "Globalcommand" in the current running program, alerting the user of the status of the program the user is attempting to command, col. 13, lines 45-60).

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Kojima *et al.* do not teach first recognizing the speech command and thereafter determining the device's operating state and checking whether it is a selectable reference command that can be selected in said operating state, and, if it is not, substituting a command that is selectable. However, one of ordinary skill in the art would have known that this is a well-known alternative way to handle input commands. A person with ordinary skill has good reason to pursue the known options within his or her technical grasp, because recognizing the command first and then checking the appropriateness of the recognized command for the current operating state afterward allows a single command recognition vocabulary to be used, thus avoiding the need to keep switching the command recognition vocabulary with all changes in system state.

As to claim 8, Kojima *et al.* teach wherein the recognizing unit computes concordance rate between the speech and each of the reference commands, and selects, as the recognized reference command, a highest concordant reference command that has a highest concordance rate among the reference commands (determining how well the input speech matches a reference command, and selecting a recognition result based on this judgment, col. 16, lines 50-65) wherein, when the recognized reference command is determined to be not the selectable reference command, the substituting unit substitutes, for the recognized reference command, a given reference command that is one of the selectable reference commands and has a highest concordance rate among the selectable reference commands (when the command is determined to be not available, a global command is selected, best able to

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inform the user of the status of the program to be controlled, col. 13, lines 45-60, and col. 14, lines 15-25).

6. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima et al. as applied to claim 7, above, in further view of Kaneyoshi (JP 2000-020086).

As to claim 9, Kojima et al. do not teach wherein the substituting unit includes a list including mis-recognizable reference commands that are apt to be mis-recognized with respect to each of the reference commands, and wherein, when the recognized reference command is determined to be not the selectable command, the substituting unit determines, with referring to the list with respect to the recognized reference command, one of the mis-recognizable reference command that is to be substituted.

However, Kaneyoshi teaches a set of substitutable commands for input commands that are not correctly recognized in reference to the status of the application (paragraphs 8-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Kojima et al. with the scaling of speech recognition dictionaries taught by Kaneyoshi to create a voice recognition unit able to decrease an incorrect recognition of the incoming speech, as taught by Kaneyoshi (paragraph 4).

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As to claim 10, Kojima et al. do not teach wherein, when the recognized reference command is one of a reciprocal pair of two reference commands that are for working oppositely to each other and the recognized reference command is determined to be not the selectable reference command, the substituting unit substitutes the other of the reciprocal pair for the recognized reference command.

However, Kaneyoshi teach when a command is mis-recognized, selecting another command from a scaled dictionary. Further, Kaneyoshi teach that using an alternative command when one is unavailable, and the input is found to be invalid (paragraphs 9-11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Kojima et al. with the scaling of speech recognition dictionaries taught by Kaneyoshi to create a voice recognition unit able to decrease an incorrect recognition of the incoming speech, as taught by Kaneyoshi (paragraph 4).

As to claim 11, Kojima et al. do not teach wherein the reciprocal pair include an enabling reference command and a disabling reference command, and wherein the enabling reference command is for enabling one of that the device is running and that a function of the device is functioning, while the disabling reference command is for disabling one of that the device is running and that the function of the device is functioning.

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However, Kaneyoshi teach when a command is mis-recognized, selecting another command from a scaled dictionary. Further, Kaneyoshi teach that using an alternative command when one is unavailable, and the input is found to be invalid (paragraphs 9-11). Where it would have been obvious to one of ordinary skill in the art at the time of the invention that commands such as "off" would be made unavailable when the status is set to "off" and "on" when the status is set to "on" since such commands during such states would cause the system to have to report an incorrect recognition, and Kaneyoshi teaches scaling the dictionary for the recognizer to decrease when an incorrect recognition would occur (paragraph 4), and these commands would be paired in the dictionary for easy and efficient access.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Kojima et al. with the scaling of speech recognition dictionaries taught by Kaneyoshi to create a voice recognition unit able to decrease an incorrect recognition of the incoming speech, as taught by Kaneyoshi (paragraph 4).

As to claim 12, Kojima et al. do not teach wherein the certain operating state of the device is an operating state where a function of the device is functioning, wherein the function of the device functions in multiple steps, wherein each of the reciprocal pair controls the function of the device for moving into one of the multiple steps, and wherein, even when the recognized reference command is one of the reciprocal pair and is determined to be not the selectable reference command, the substituting unit

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does not substitute the other of the reciprocal pair for the recognized reference command.

However, Kaneyoshi teaches based on the operating state, a dictionary is scaled making the certain speech inputs available and other speech inputs not available, where inputs supplied by the user are matched only against the stored speech inputs that are available (paragraphs 6-8). Where it would have been obvious to one of ordinary skill in the art at the time of the invention that commands such as "off" would be made unavailable when the status is set to "off" and "on" when the status is set to "on" since such commands during such states would cause the system to have to report an incorrect recognition, and commands to control a specific step would only be made available when that step is available, since other commands would cause the system to have to report an incorrect recognition. It would have been obvious to one of ordinary skill in the art, since Kaneyoshi teaches scaling the dictionary for the recognizer to decrease when an incorrect recognition would occur (paragraph 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Kojima et al. with the scaling of speech recognition dictionaries taught by Kaneyoshi to create a voice recognition unit able to decrease an incorrect recognition of the incoming speech, as taught by Kaneyoshi (paragraph 4).

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Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Talivaldis Ivars Smits whose telephone number is 571-272-7628. The examiner can normally be reached on 8:30 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10/10/2007


TĀLIVALDIS IVARS ŠMITS
PRIMARY EXAMINER